

Claims

1. A dry composition comprising isomaltulose, at least one polyol and a carbohydrate (H) selected from the group consisting of fructose, sucrose, invert sugar, and mixtures thereof.
2. A composition according to claim 1 characterized in that it is further comprising at least one intense sweetener.
3. A composition according to claim 1 or 2 characterized in that in said composition the weight ratio of isomaltulose to said carbohydrate (H) is from 20:80 to 70:30.
4. A composition according to claim 1 or 2 characterized in that in said composition the weight ratio of isomaltulose to said carbohydrate (H) is from 30:70 to 60:40.
5. A liquid blend comprising a liquid and a dry composition according to anyone of claims 1 to 4.
6. A liquid blend according to claim 5 characterized in that said blend is further comprising a fructose syrup.
7. A solid or semi-solid comestible characterized in that said comestible is comprising edible ingredients and at least 5% of dry substance of said comestible is a dry composition according to anyone of claim 1 to 4.
8. A liquid comestible characterized in that it is comprising
 - a) Edible ingredients and a liquid blend according to claim 5 or 6 and optionally an edible liquid, or
 - b) an edible liquid and a comestible according to claim 7.

9. A comestible according to claim 7 or 8 characterized in that said comestible is selected from the group consisting of tablets, bars, confectionery, beverages, beverage concentrates, gels, drink powders, diabetic food, baby food, infant food, dietetic food, slimming food, food for special dietary needs, and medical food.
10. A beverage according to claim 9 characterized in that said beverage is selected from the group consisting of hypotonic beverages, soft drinks, sports drinks, hypertonic beverages, energy drinks, and isotonic beverages.
11. A beverage according to claim 10 characterized in that it is comprising further carbohydrates, proteins, peptides, amino acids, antioxidants, fats, vitamins, trace elements, electrolytes, intense sweeteners, edible acids, flavors and/or mixtures thereof.
12. A beverage according to claim 11 characterized in that said further carbohydrates are selected from the group consisting of monosaccharides, disaccharides, gelling starches, starch hydrolysates, dextrans, fibers, polyols and mixtures thereof.
13. A beverage according to anyone of claims 10 to 12 characterized in that at least 50% of the dry substance of said beverage is a dry composition according to anyone of claims 1 to 4.
14. A beverage according to anyone of claims 10 to 12 characterized in that at least 80%, preferably at least 90%, more preferably at least 95% of the dry substance of said beverage is a dry composition according to anyone of claims 1 to 4.
15. A beverage according to anyone of claims 10 to 14 characterized in that said beverage is an isotonic beverage and that it is comprising isomaltulose, at least one polyol and a carbohydrate (H) selected from the group consisting of fructose, sucrose, invert sugar, and mixtures thereof and the weight ratio of isomaltulose to said carbohydrate (A) is from 20:80 to 70:30.

16. A method of preserving osmolality of a beverage, preferably an isotonic beverage by replacing 20 to 90%, preferably 30 to 80% by weight of sucrose with trehalose or isomaltulose.
17. A method according to claim 16 characterized in that at least one intense sweetener is added.
18. A method according to claim 16 or 17 characterized in that a polyol or a mixture of polyols is added.
19. A method according to anyone of claims 16 to 28 characterized in that osmolality is preserved for at least one month at ambient temperature, preferably for at least 3 months.
20. Use of
 - a) isomaltulose,
 - b) trehalose, or
 - c) mixture of isomaltulose and trehalose,for the manufacture of athletics food, dietetic food, food for special dietary needs, slimming food, diabetics food, baby food, infant food and food for elderly, and medical food for increasing fat oxidation.
21. Use according to claim 20 characterised in that a), b) or c) is enriched with a sweet energy source selected from the group consisting of fructose, sucrose, invert sugar, polyol, intense sweetener, and mixtures thereof.
22. Use of
 - a) a mixture (A) of isomaltulose and sweet energy source selected from the group consisting of fructose, sucrose, invert sugar, polyol, intense sweetener, and mixtures thereof, or

b) a mixture (B) of trehalose and sweet energy source selected from the group consisting of fructose, sucrose, invert sugar, polyol, intense sweetener, and mixtures thereof,

for manufacture of athletics food, dietetic food, food for special dietary needs, slimming food, diabetics food, baby food, infant food and food for elderly, and medical food for sustained energy release.

23. Use according to claim 22 characterized in that sustained energy release is provided by increased fat oxidation.

24. Use of

a) a mixture (A) of isomaltulose and sweet energy source selected from the group consisting of fructose, sucrose, invert sugar, polyol, intense sweetener, and mixtures thereof, or

b) a mixture (B) of trehalose and sweet energy source selected from the group consisting of fructose, sucrose, invert sugar, polyol, intense sweetener, and mixtures thereof,

to manufacture comestibles that modify perception of satiety or hunger.

25. Use of

a) a mixture (D) of isomaltulose and trehalose,

b) isomaltulose, trehalose, at least one intense sweetener and/or carbohydrate (J) selected from the group consisting of fructose, sucrose, invert sugar, polyol and mixtures thereof,

for the manufacture of athletics food, dietetic food, food for special dietary needs, slimming food, diabetics food, baby food, infant food and food for elderly, and medical food for reduction of digestive discomfort.